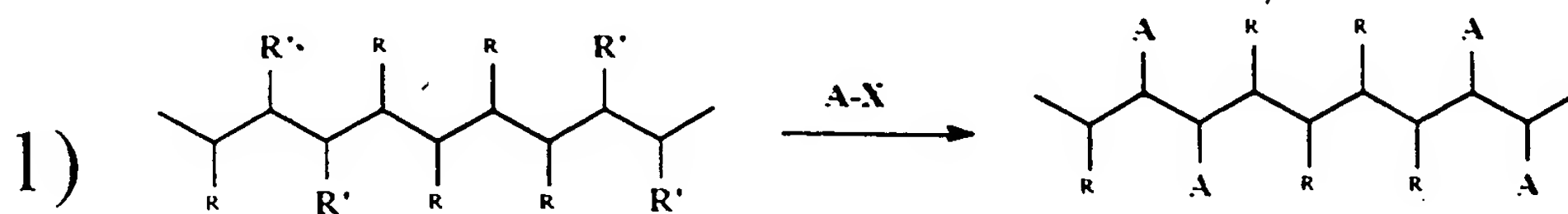
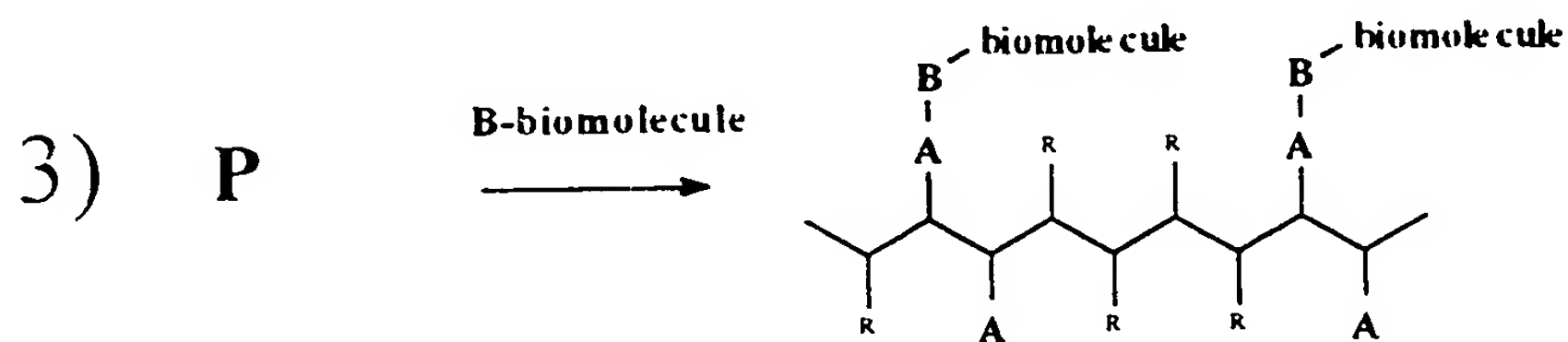
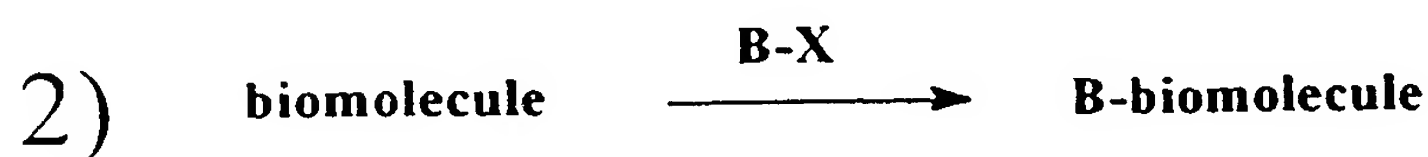


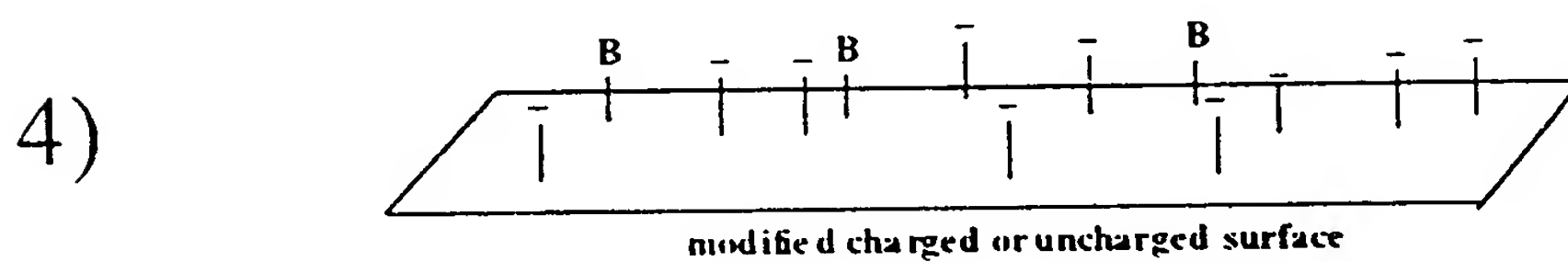
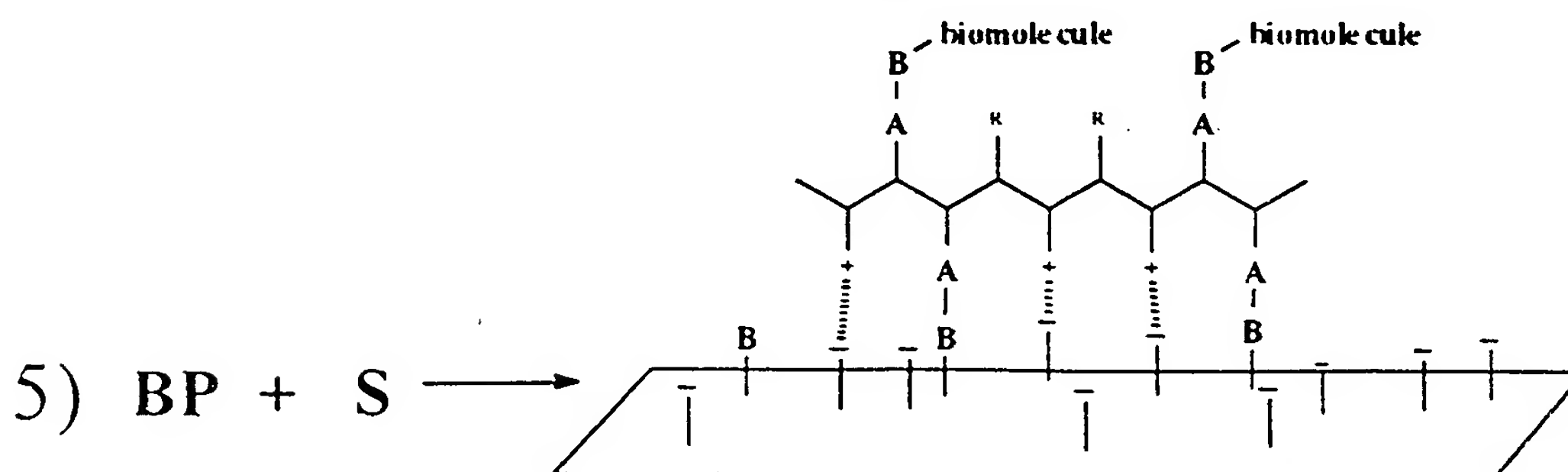
Figure 1

**P**

where R' is the same or  
different than R

**BP**

biomolecule/polymer conjugate

**S****BPS**

biopolymer/polymer/surface ternary system

Figure 2

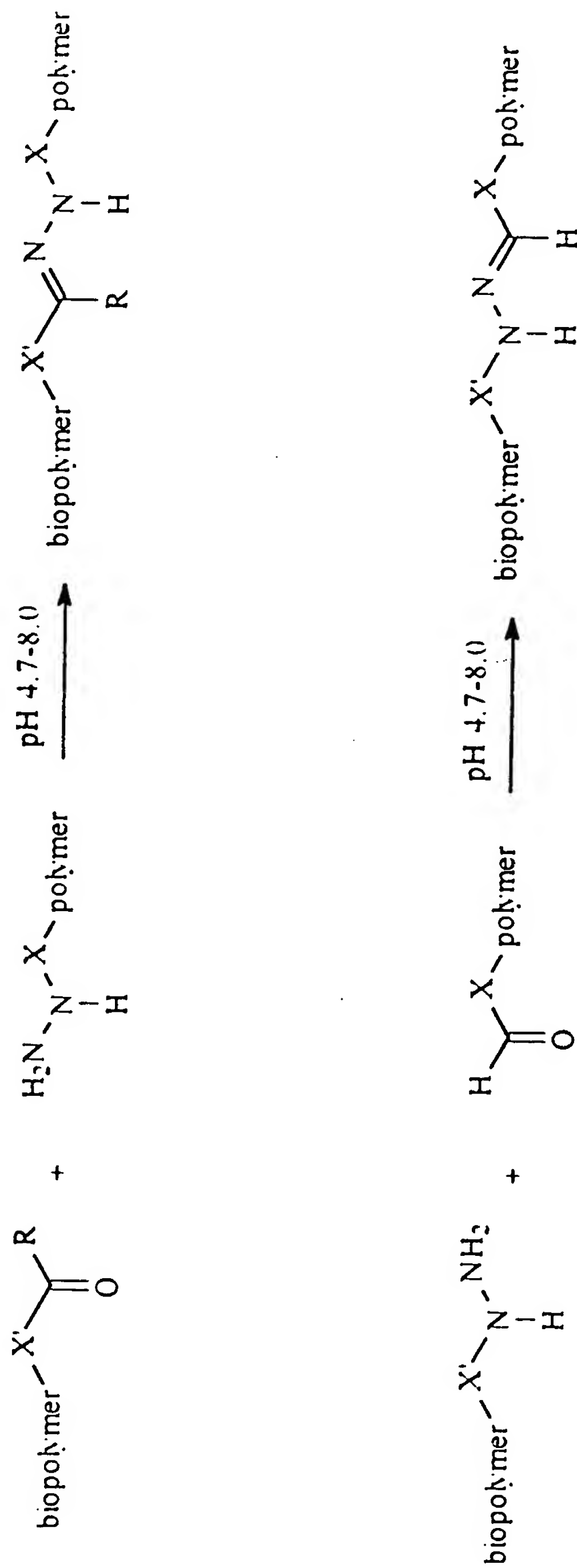
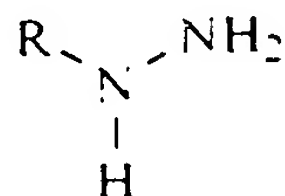
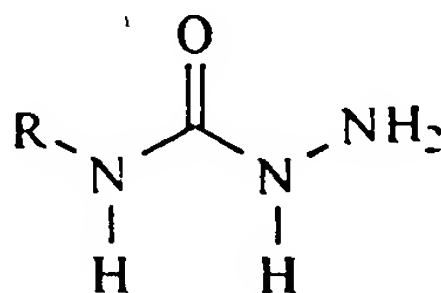


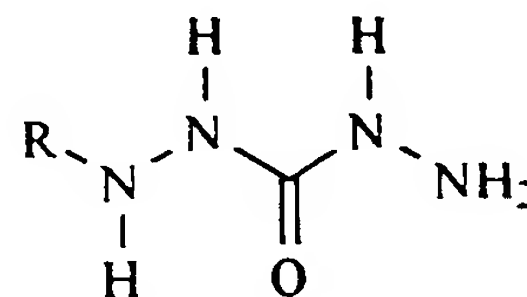
Figure 3



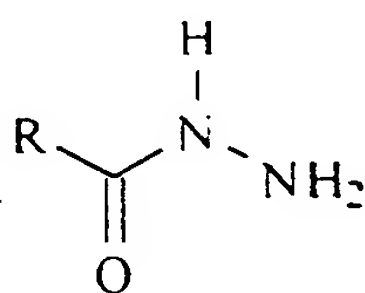
hydrazine



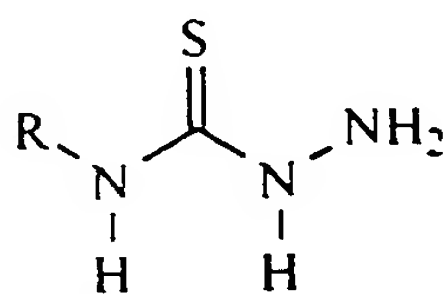
semicarbazide



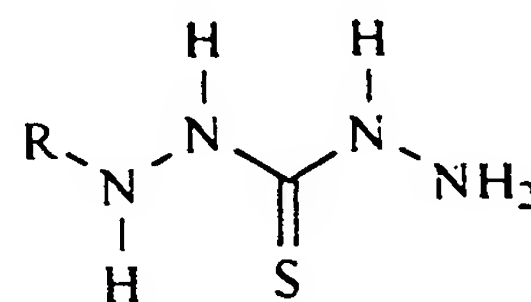
carbazide



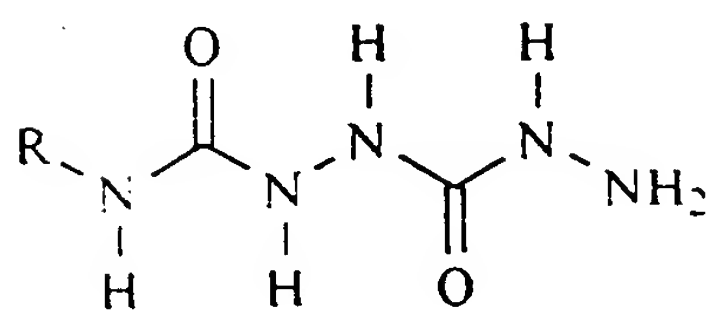
hydrazide



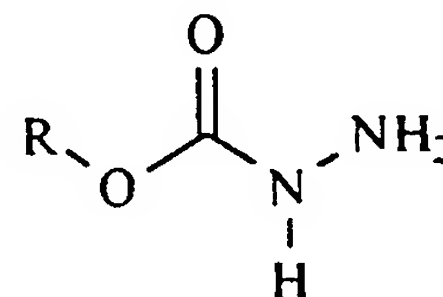
thiosemicarbazide



thiocarbazide



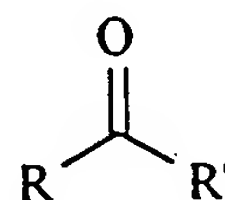
carbonic acid dihydrazine



hydrazine carboxylate



aminoxy



R = alkyl, aromatic or heteroaromatic group

R' = H or straight, branched or cyclic alkyl moiety  
or aromatic or heteroaromatic moiety

carbonyl derivatives

1005027-04402

Figure 4

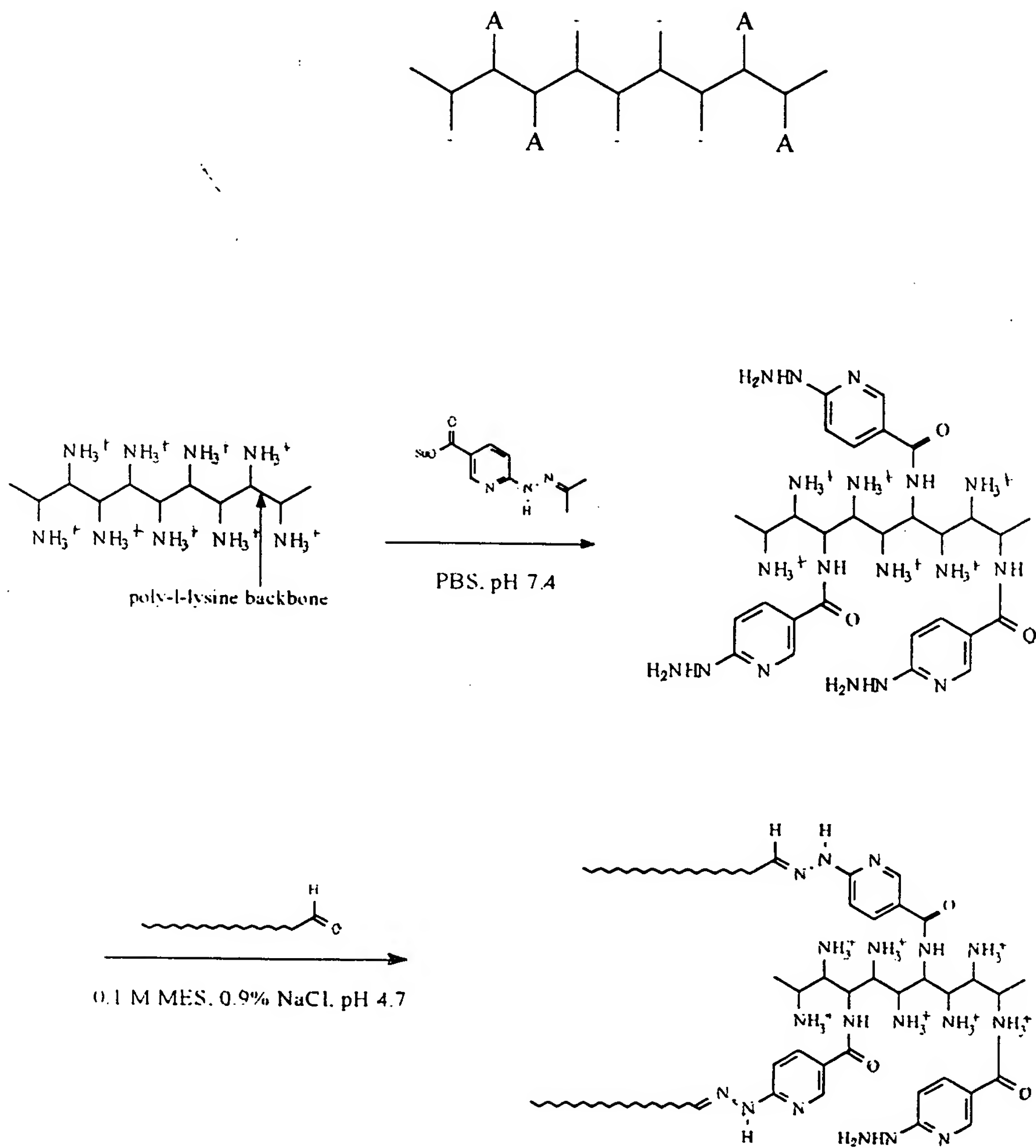
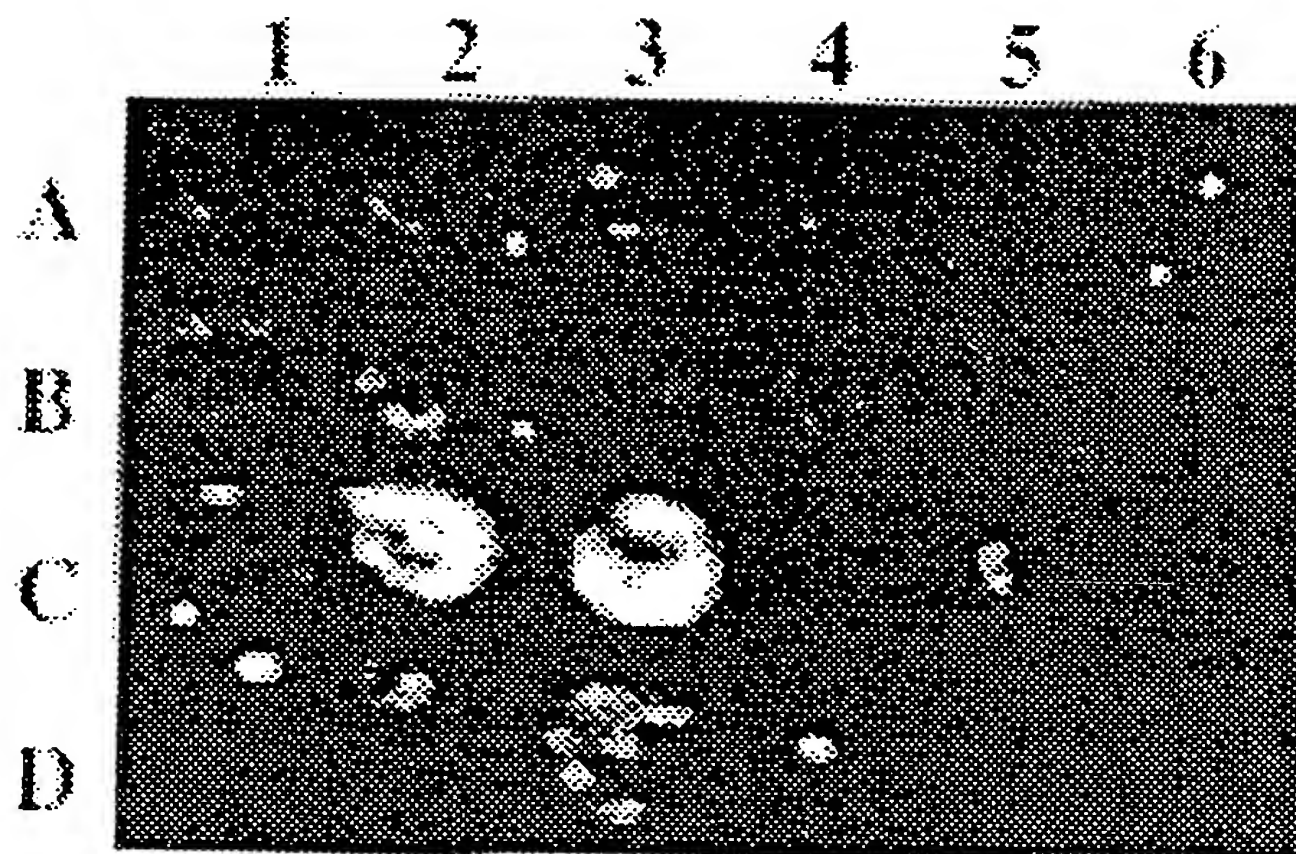


Figure 5

- A. H<sub>2</sub>N-oligo  
 B. OHC $\Phi$ -oligo  
 C. H<sub>2</sub>NHN-oligo  
 D. H<sub>2</sub>NHNCO-olig



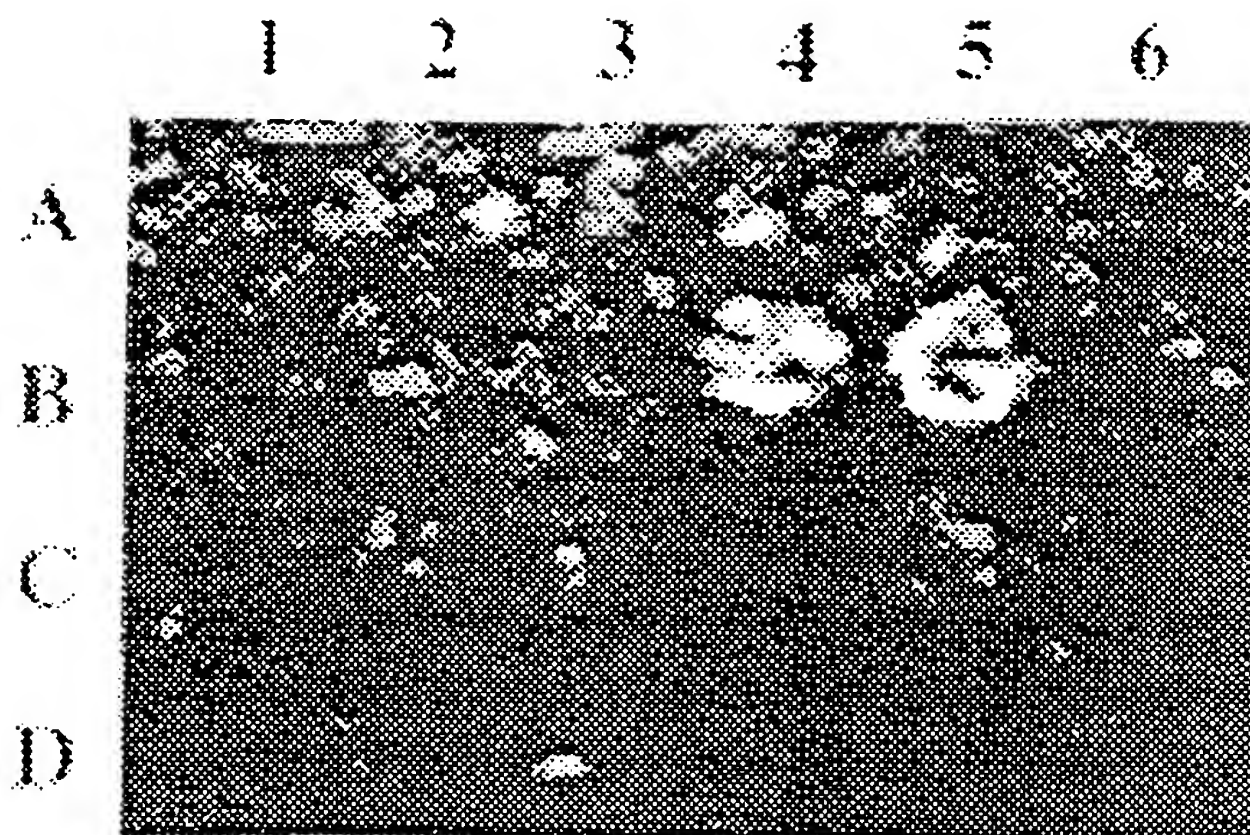
- 1) polyK (20K MW)  
 2) polyK/ $\Phi$ CHO (10X)  
 3) polyK/ $\Phi$ CHO (20X)  
 4) polyK/HyNic (10X)  
 5) polyK/HyNic (20X)  
 6) no polymer

Figure X: Matrix experiment (see Example 2) demonstrating the covalent nature of the immobilization of a 5'-hydrazino oligo//sCHO/poly-l-lysine (polyK) conjugate on a amino modified glass slide following hybridization to its fluorescent complement.

204240-220500T  
 1005027-042402

Figure 6

- A. H<sub>2</sub>N-oligo  
B. OHC-oligo  
C. H<sub>2</sub>NHN-oligo  
D. H<sub>2</sub>NHNCO-oligo



- 1) polyK (20K MW)  
2) polyK/sCHO (10X)  
3) polyK/sCHO (20X)  
4) polyK/HyNic (10X)  
5) polyK/HyNic (20X)  
6) no polymer

204240-220500F

Figure 7

